

## RESPONSE TO ENVIRONMENTAL PROTECTION AGENCY (EPA) COMMENTS ON THE DRAFT AIR MONITORING REPORT, HUNTERS POINT ANNEX (HPA)

This document presents the Navy's responses to comments from U.S. Environmental Protection Agency (EPA) on the draft air monitoring report, Hunters Point Annex dated January 6, 1995. The comments addressed below were received from EPA. Also, attached to these responses to comments is a proposed work plan to conduct additional air monitoring at Hunters Point Annex to fill in data gaps in the draft air monitoring report. This proposed work plan is presented in Appendix A of this document.

### RESPONSE TO EPA COMMENTS

#### General Comments

1. **Comment:** Draft Report Volume I and II, Introduction. The initial two paragraph introductions to both Volume I and Volume II of the draft reports are identical. Both introductions should provide more background information, in summary form, regarding the previously defined sites within the HPA containing, or potentially containing, hazardous waste. Please also specify what is covered in the volume in hand, for example, "This volume, Volume II, contains ..."

**Response:** The report has been revised in response to this comment. Volume I states, "Ambient air quality at HPA has been characterized with an exhaustive ambient air monitoring program conducted at 17 preselected locations. Volume I of this final draft report contains the data and results of the ambient air monitoring activities. Baseline emissions were estimated at 16 locations within HPA. Baseline volatile organic compounds (VOC) emissions were measured directly with an isolation flux chamber, and baseline emissions of particulate matter were estimated using a rapid site inspection and characterization in conjunction with predictive models for soil erosion at the same 16 locations. Volume II of this final draft report contains the data and results of the baseline emissions estimation.

This volume contains the results of the ambient air monitoring. From June 13 to July 7, 1994, Brown and Caldwell (BC) monitored ambient air at HPA. Testing was performed to determine the concentrations of asbestos, formaldehyde, metals, semivolatile organic compounds (SVOC), and VOCs in the ambient air at 17 selected locations. In addition, field blanks and collocated duplicates were collected. Samples were taken on five different days at each location for every analyte."

Volume II has been modified and now states, "Ambient air quality at HPA has been characterized with an ambient air monitoring program conducted at 17 preselected locations. Volume I of this final draft report contains the data and results of the ambient air monitoring activities. Baseline emissions were estimated at 16 locations within HPA. Baseline volatile organic compounds (VOC) emissions were measured directly with an isolation flux chamber, and baseline emissions of particulate matter were estimated using a rapid site inspection and

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response to this comment.

6. **Comment:** Data Appendices. The data reported in the Draft Report Volume I have not been validated or qualified by an independent reviewer. Appendices A, B, C, D and E provide some of the laboratory quality control (QC) data needed to perform data validation though no raw data are present. Based on QC summary information provided, no significant problems were found with data quality.

**Response:** Comment noted.

7. **Comment:** Data Appendices. Samples were qualified "B" by the laboratory, indicating that the compounds qualified were detected in associated method blanks. These "B's" would be replaced by "UJ," undetected due to blank contamination if the sample result was less than five (or ten, in some cases) times the blank detected result. If the sample result was greater than the above criteria then the "B" qualifier would be removed. Please verify the laboratory qualifiers are correct.

**Response:** Laboratory qualifiers are correct. Compounds flagged with a "B" laboratory qualifier are compounds detected in the associated method blank. In the environmental samples collected, compounds that received the "B" qualifier are considered undetected (UJ) if the sample results are less than 5 times the blank detected concentration.

#### Specific Comments

1. **Comment:** Draft Report Volume I, Section 1, Page 1-2, Paragraph 1, 7th sentence. The sites containing, or potentially containing, hazardous wastes should be briefly summarized for the reader. Other studies may be cited, but the summary should be sufficient to suffice in a stand-alone document.

**Response:** The HPA facility has been divided into five parcels designated Parcel A, B, C, D, and E. Within these 5 parcels, 77 sites have been identified under the Navy's Installation Restoration (IR) Program. These sites have had observed or potential releases of chemicals to the environment. Further information on the potentially contaminated sites at HPA is available in *Hunters Point Annex Base Realignment and Closure Cleanup Plan, Revision 2 (PRC 1996)*. This information has been added to the report.

2. **Comment:** Draft Report Volume I, Section 1, Page 1-2, Paragraph 2, 1st sentence. This introduction needs to provide more detail on the basis for pre-selecting the 17 air monitoring locations. Additional information should describe why the 17 sites were selected, by whom, when, and what EPA guidelines were followed during the selection process for locating the air monitoring sites.

**Response:** Sampling locations for ambient air monitoring were chosen by the Navy prior to

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- Location 4, downwind of IR-4
- Location 6, downwind of IR-7
- Location 8, downwind of IR-17
- Location 10, downwind of IR-22
- Location 11, upwind of IR-1/21
- Location 13, downwind of IR-1/21
- Location 14, downwind of IR-2
- Location 15, downwind of IR-3
- Location 16, downwind of IR-5
- Location 17, downwind of IR-6
- Location 18, downwind of IR-18
- Location 19, downwind of IR-9
- Location 20, northwestern end of IR-2
- Location 21, between Buildings 217 and 280, in IR-30

This information has been added to Volume II of the report.

4. **Comment:** Draft Report Volume I, Section 1, Page 1-2, Paragraph 4, 3rd sentence. The introduction should include the information that the 17 pre-selected locations for the air monitoring also have pre-selected sample ID numbers from 1 to 20, as shown in the Site Results tables.

**Response:** The report has been revised in response to this comment.

5. **Comment:** Draft Report Volume I, Section 2, Site Results tables, Asbestos Sampling Results, Page 2-8. The "Total structures/normal liter:" values for Site 10 should be 4.0, and for Site 13 should be 13. Please modify the asbestos results discussion in Section 3 (Page 3-2) as appropriate.

**Response:** The report has been revised in response to this comment.

6. **Comment:** Draft Report Volume I, Section 3, Page 3-2, Paragraph 1, 4th sentence. Please provide the basis for comparing the HPA air monitoring results with the CARB study, and describe what this comparison implies about the ambient air quality conditions at HPA. Specifically, if an analyte detected at a concentration at HPA exceeds that presented in the CARB study, does that mean there is a problem? EPA agrees with PRC Environmental Management's recommendation to compare the HPA results with EPA Region IX preliminary remediation goals (PRGs) for ambient air. Although the PRG concentrations of many analytes are likely to be higher than those presented in the CARB study, the comparison should be made. A graphical presentation comparing the PRGs, HPA results and CARB values would be helpful.

**Response:** The comparison between the HPA air monitoring results and the CARB study results is made only to provide a general picture of the ambient air quality at HPA relative to the surrounding areas. The comparison is not intended to evaluate

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- Response: The misspelled acronym has been corrected in the report.
12. Comment: Draft Report Volume I, Section 3, Page 3-4, Paragraph 5. The sentence structure in this paragraph is confusing, please re-word.
- Response: This paragraph was rewritten and moved to Section 3, Comparisons and Conclusions.
13. Comment: Draft Report Volume I, Section 3, Page 3-4, Paragraph 6, last sentence. The statement, "...the results are more striking..." is confusing. How much lower was the lead concentration in the CARB 1990 data set than for previous years? Expand the discussion/comparison with the CARB data set by using numbers.
- Response: The 1990 average lead concentration from the CARB data is 19.1 nanograms per standard cubic meter (ng/std. m<sup>3</sup>). The Location 13 average is 110 ng/std. m<sup>3</sup>, almost 6 times higher than the 1990 CARB average. These lead concentration data have been incorporated into the text of this report.
14. Comment: Draft Report Volume I, Section 3, Page 3-4, Paragraph 2. EPA agrees that the metals sampling at Site 13 should be repeated after the sandblast grit pile is removed. The second sentence implies that there was activity at the sandblast grit pile during a certain time period, but this is not clear. It would be helpful for this document to provide a chronology, such as a timeline graph, that depicts when each site was monitored and to footnote time periods when off-site activities may have influenced sampling results.
- Response: A chronology of sampling activities is not available from the subcontractor. See response to comment 10.
15. Comment: Draft Report Volume I, Section 3, Page 3-5, Paragraph 4. This paragraph implies that the method detection limits (MDL) for several compounds were below those used in the CARB study. More explanation should be provided as to why the HPA MDLs were below those used in the comparison study.
- Response: The EPA methods chosen for air sampling at HPA were determined to be the best overall method for the specific sampling objectives at HPA. Some of these methods are different than the methods used in the CARB study and thus, the MDLs are different in some cases. For more information regarding selection of sampling methods, see *Draft Final Air Sampling Report and Work Plan: Naval Station, Treasure Island, Hunters Point Annex, San Francisco, California*. Harding Lawson Associates. July 1992.
16. Comment: Draft Report Volume I, Section 3, Page 3-5, Paragraph 5, 3rd sentence. Sentence structure is confusing, please re-write.
- Response: The report has been revised in response to this comment.

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of the text reserved for comparing HPA results with the CARB study.

Response: Tables of each HPA air monitoring site's 5-day average results have been added to the report. Average CARB concentrations can be compared with data in these tables.

22. Comment: Draft Report Volume I, Section 12, Map. Please add a legend which explains all symbols, particularly the IR- and Location points. The location of the meteorological station is not evident. The location of the meteorological station should also be included on the map and explained in the introduction section text. A cover sheet should be provided to be consistent with the other sections in the Volume I and Volume II reports.

Response: The report has been revised in response to this comment. The meteorological station was located at HPA. However, the exact location was not available, but was in the general vicinity of the meteorological station used for previous sampling.

23. Comment: Draft Report Volume II, Section 1. Procedures outlined in EPA's *Rapid Assessment of Exposure to Particulate Emission from Surface Contaminated Sites* describes procedures for estimating traffic related emissions. Please modify this report to include a discussion of traffic related issues.

Response: Detailed road and traffic information is required to estimate emissions due to mechanical resuspension of particulates. Current traffic at HPA is minimal and future traffic is unknown. Furthermore, the discussion given in *Rapid Assessment of Exposure to Particulate Emission from Surface Contaminated Sites* regarding vehicle traffic is limited to travel over unpaved roads. Most of the roads at HPA are paved. When a vehicle travels over a paved road, the surface soils are isolated from contact with vehicle tires. Therefore, the soils will not be resuspended.

24. Comment: Draft Report Volume II, Section 1, Page 1-2, Paragraph 2. This paragraph states that baseline emissions were made at 15 locations within the HPA. Please clarify why and how only 15 locations were chosen. Additionally, according to the map in Section 10, these 15 locations for baseline emissions are spatially different than the 17 air monitoring sites. The introduction should include a discussion of this difference in locations.

Response: See responses to specific comments 2 and 3.

25. Comment: Draft Report Volume II, Section 2, Page 2-2. The PM<sub>10</sub> Emission Factor table should have footnotes which define the units used.

Response: The PM<sub>10</sub> units are defined in the table as g/m<sup>2</sup>-hr, which is grams per square meter per hour. This explanation of the units term has been added as a footnote to the table.

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30. **Comment:** Draft Report Volume II, Section 6, site photos, Page 6-2. A glossary or description should be provided as to the differences between "Area View" and "Square" captions beneath each photograph. Why do some photographs of one Location have Area Views A, B, C and D, whereas other Location Area View photographs do not? Similarly, why do some photographs of one location have Squares 1, 2, 3, and 4 represented, whereas other Location Squares do not?
- Response:** The purpose of the photo documentation in Section 6, Site Photos, is twofold; to illustrate the general aspects of the wind erosion assessment locations, and to document the 1x1 meter subareas randomly selected within each location for detailed field analysis. The "area view" photographs depict the areas of general surface characteristics, while the "square view" photographs depict those subareas which were analyzed with data reported in Tables 4-1 through 4-8.
31. **Comment:** Draft Report Volume II, Section 12, Map. Please add a legend which explains all symbols, particularly the IR- and Location points. Location 21 is shown on this map in a location that does not appear to match any of the 17 air monitoring stations presented on a similar map in Section 12 of the Volume I report.
- Response:** The map has been revised in response to this comment. Location 21, located in IR-29, was a flux chamber measurement added during the course of the field sampling event to investigate any possible emissions in an area where VOCs had been detected in the deep subsurface in dry fractures in the bedrock. This subsurface detection occurred while air sampling was being conducted so this location was added at a late date, resulting in the reporting of the data but the omission of the sample location on the list of locations. Please see response to comment 26 as well.
32. **Comment:** Appendix D, lab batch 9406176, p.4. The two detected phthalates are qualified with a "B" indicating that the compounds were detected in associated method blank. The two phthalates should be qualified as undetected due to blank contamination.
- Response:** See response to general comment 7.
33. **Comment:** Appendix D, lab batch 9406176, p.5. Three surrogate samples had percent recoveries less than the method criteria. The data should be flagged as estimated for detected and undetected compounds (J or UJ).
- Response:** Undetected results have been flagged "UJ"; detected results are considered estimated "J" and determined usable for the purposes of this report.
34. **Comment:** Appendix E, lab batch 9406256 p.17, lab batch 9406275 p.10, and lab batch 9407024 p.9. All these pages report matrix spike recoveries. Each page contains matrix spike percent recoveries that were below the method limit of

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## REFERENCES

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- HLA. 1992. *Draft Final Air Sampling Report and Work Plan: Naval Station, Treasure Island, Hunters Point Annex, San Francisco, California*. Harding Lawson Associates. July.
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